

CASE NO.: HSJ920030241  
Serial No.: 10/786,692  
March 20, 2006  
Page 3

PATENT  
Filed: February 25, 2004

1. (currently amended) A HDD comprising:

a disk stack;

a head stack; and

a controller determining a tilt seek distance representative of a mechanical tilt between the disk stack and head stack and undertaking at least one of: adding the tilt seek distance to a logical seek distance to determine a total seek distance useful for determining an estimated access time (EAT), ~~and~~ or using the tilt seek distance to preposition a target head prior to making electrical contact with the target head.

2. (original) The HDD of Claim 1, comprising a servo measuring a position of a current head in electrical contact with the controller just prior to an electrical connection of a target head with the controller, the servo also measuring a position of the target head just after making electrical connection with the target head, the tilt seek distance being based on the difference in position of the target head and the position of the current head.

3. (original) The HDD of Claim 1, wherein the controller accesses a table of tilt values to determine an average tilt seek distance.

4. (original) The HDD of Claim 1, wherein the total seek distance is used to access at least one (RPO) table.

1189-19.AM2

CASE NO.: HSJ920030241  
Serial No.: 10/786,692  
March 20, 2006  
Page 4

PATENT  
Filed: February 25, 2004

5. (original) The HDD of Claim 4, wherein the controller uses the total seek distance and an actuator pre-move distance to modify the RPO table.

6. (original) The HDD of Claim 1, wherein the total seek distance is used by the controller to actuate a servo to move an actuator associated with the target head before electrical connectivity is established between the target head and controller.

7. (currently amended) A hard disk drive (HDD) comprising:

at least one rotatable disk;

a head stack; and

at least one HDD controller controlling the head stack and undertaking at least one of: executing commands in a queue, and or prepositioning a target head before electrical contact therewith is made, based at least in part on a mechanical tilt between the head stack and at least one disk.

8. (original) The HDD of Claim 7, comprising a servo measuring a position of a current head in electrical contact with the controller just prior to an electrical connection of a target head with the controller, the servo also measuring a position of the target head, a tilt seek difference being based on the difference in position of the target head and the position of the current head.

1189.19.0M2

CASE NO.: HSJ920030241  
Serial No.: 10/786,692  
March 20, 2006  
Page 5

PATENT  
Filed: February 25, 2004

9. (original) The HDD of Claim 7, wherein the controller accesses a table of tilt values to determine an average tilt seek distance.

10. (original) The HDD of Claim 7, wherein the tilt seek difference is used at least in part to access at least one (RPO) table.

11. (original) The HDD of Claim 10, wherein the controller uses the distance and an actuator pre-move distance to modify the RPO table.

12. (currently amended) A HDD comprising:

a disk stack;

a head stack; and

a controller determining a mechanical tilt based on a difference between a current head position and a target head position and undertaking at least one of: using the difference to determine a physical seek distance useful for determining an estimated access time (EAT), and or using the difference to preposition a target head prior to making electrical contact with the target head.

13. (original) The HDD of Claim 12, comprising a servo measuring a position of the current head in electrical contact with the controller just prior to an electrical connection of the target head with the controller, the servo also measuring a position of the target head.

1189-19.AMZ

CASE NO.: HSJ920030241  
Serial No.: 10/786,692  
March 20, 2006  
Page 6

PATENT  
Filed: February 25, 2004

14. (original) The HDD of Claim 12, wherein the controller accesses a table of values to determine an average difference.
15. (original) The HDD of Claim 12, wherein a value at least representative the difference is used to access at least one (RPO) table.
16. (original) The HDD of Claim 15, wherein the controller uses the difference and an actuator pre-move distance to modify the RPO table.
17. (original) The HDD of Claim 12, wherein a value representative of the difference is used by the controller to actuate a servo to move an actuator associated with the target head before electrical connectivity is established between the target head and controller.

1189-19.AM2